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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/797,186

03/11/2004

Akiko Niimi

119077

4948

25944 7590 03/09/2007  
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EXAMINER

CRENSHAW, MARVIN P

ART UNIT

PAPER NUMBER

2854

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/09/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

**Application No.**

10/797,186

**Applicant(s)**

NIIMI, AKIKO

**Examiner**

Marvin P. Crenshaw

**Art Unit**

2854

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on the amendment on 9/12/2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1 - 16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1- 15 is/are rejected.
- 7) ☒ Claim(s) 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau. (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4 – 7, 10, and 12 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorpe (4,938,130) in view of Dubuit (6,397,740).

With respect to claims 1, 10 and 12, Thorpe teaches a printing device (Fig. 1) comprising a platen (11) having a supporting face for supporting a fabric as a printing medium, the platen (11) moving in an intended direction (Fig. 3), a screen plate (16) used during screen printing fitting detachably (See col. 4, lines 15 - 18) onto said supporting face (platen 11 has a supporting face) in a state where the printing medium (12) is sandwiched between said screen plate (13) and said supporting face of said platen (Fig. 1) and a frame (13) wherein the screen plate together with the frame have a lock-and-key relationship with the platen. The lock and key relationship is achieved by the groove 23 and projection 24.

However, Thorpe does not teach ink-jet printing after stencil printing.

Dubuit teaches printing by an ink-jet head (15) for performing ink-jet printing onto a printing medium after stencil printing (See Claim 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Thorpe to have one of the stencil printing machines substituted with an ink-jet printer to perform ink-jet printing onto a printing medium after stencil printing as taught by Dubuit, since Dubuit teaches ink-jet printing is advantageous for maintaining acceptable printing productivity.

With respect to claim 4, 6 and 7, Thorpe teaches a printing device wherein a plurality of said screen plates (See col. 7, lines 22 – 25, other screen frames may be used) of different types are prepared and a printing device wherein the printing medium is a fabric (See col. 4, lines 15 - 19).

With respect to claim 5, Thorpe teaches a printing device (Fig. 1) wherein said screen plate (16) or said platen (11) comprises an adjustment mechanism (23 and 24) whereby said screen plate can be fitted (See col. 4, lines 15 - 18) onto said supporting face in a state with substantially no gaps with respect to the printing medium (see col. 6, lines 50 – 59).

With respect to claim 13, Thorpe teaches the printing device wherein at least one of the screen plate (16) and the frame (13) includes at least one of a projection (24) and a groove (23), and the printing medium supporting member (11) includes the other of the projection (23) and the groove (24) such that when the screen plate and the frame are detachably connected (Fig. 1, when the screen frame is lowered onto the platen) to the printing medium supporting member the at least one projection connects with the at least one groove to lock the screen plate in position relative to the printing medium supporting member.

With respect to claim 14, Thorpe teaches the printing device (Fig. 1) wherein the screen plate is integrally connected (See col. 4, lines 8 – 10) to the frame.

With respect to claim 15, Thorpe teaches the printing device (Fig. 1) wherein the screen plate is detachably attached (See col. 4, lines 8 – 10) to the frame.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 3, 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Thorpe in view of Dubuit (6,397,740) as applied to claims 1, 4 – 7, 10 and 12 - 15 above, and further in view of Siegeritz (US2002/0122208).

Thorpe in view of Dubuit teaches all that is claimed except an ink determining means for determining the density of ink and the color.

Siegeritz teaches a printing device further comprising ink color determining means (See paragraph 0014) for setting the color of the ink used in printing by means of said screen plate to a lighter color than the ink used in printing means of the ink emission section and a printing device wherein said ink color determining means set the color of the ink used in printing by means of the screen plate to white (See paragraph 0067).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Thorpe to have an ink determining means for determining and setting the color used in printing to white as taught by Siegeritz so as to provide an efficient means for selecting the color of ink to use for printing.

Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Thorpe in view of Dubuit as applied to claims 1, 4 – 7, 10 and 12 – 15 above, and further in view of Koizumi et al.

Thorpe as modified by Dubuit teaches all that is claimed except a printing method wherein the ink used in said screen printing step is set depending upon the screen plate.

With respect to claim 11, Koizumi et al. teaches a printing method wherein the ink used in said screen printing step is set depending upon the screen plate (See Col. 1, lines 24 – 25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Thorpe to have a printing method wherein the ink used in said screen printing step is set depending upon the screen plate as taught by Koizumi et al. to provide an effective means of print quality by printing a different ink with ink-jet printing.

#### ***Allowable Subject Matter***

Claim 16 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance:

With respect to claim 16, the prior art does not teach or render obvious the total combination as claimed including a printing device wherein said screen plate comprises a first frame member and at least a pair of second frame members, said frame members of said at least one pair of second frame members opposing one another and slidably engaged with an underside of said first frame member by interlocking grooves.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Response to Arguments***

Applicant's arguments filed September 19, 2006, with respect to the rejection(s) of claim(s) 1 - 12 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Thorpe in view of Dubuit.

Applicant's arguments filed September 12, 2006 have been fully considered but they are not persuasive. Specifically, Thorpe teaches printing using screen printing. Also, Dubuit teaches the apparatus of using a platen for supporting a medium as it is moved between printing machines.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marvin P. Crenshaw whose telephone number is (571) 272-2158. The examiner can normally be reached on Monday - Thursday 7:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



MPC  
March 5, 2007



**JUDY NGUYEN**  
**SUPERVISORY PATENT EXAMINER**